

Ferns of Papua.—BRAUSE⁹ has published a list of Papuan ferns collected by LEDERMANN in the expedition of 1912-1913, in connection with a study of the Papuan flora by LAUTERBACH. It illustrates how any investigation of the tropics increases very materially the number of known ferns. The present list includes 555 species, distributed among 43 genera. The following 9 genera include 400 of the species: *Dryopteris* (112), *Asplenium* (52), *Trichomanes* (51), *Hymenophyllum* (35), *Alsophila* (34), *Lindsaya* (31), *Diplazium* (31), *Aspidium* (29), *Cyathea* (25). There are described 78 new species, *Dryopteris* including 24, *Alsophila* 13, *Cyathea* 7, and *Blechnum* 7, the remaining 27 new species being distributed among 12 genera.—J. M. C.

Gentes Herbarum.—Under this title BAILEY¹⁰ has begun a new serial publication, the first fascicle containing an extensive list of plants which he collected in China in the spring and summer of 1917. The several localities are in central China, and the cultivated plants are not neglected. The collection includes 20 new species distributed among 13 genera, and 15 new varieties and forms. There are also transfers and new combinations. "The total systematic novelties and taxonomic changes are 44." The report contains also some very attractive photographs of topography and "interesting trees."—J. M. C.

Seedling anatomy.—HOLDEN,¹¹ in continuing studies of the anatomy of teratological seedlings, has investigated atypical seedlings of *Impatiens Roylei*, an Indian species naturalized in England. One of the two groups of these seedlings shows a very complete series illustrating the development of a "closely syncotylous condition" from the normal; while the other group shows a single cotyledon with no "macroscopic evidence" of syncotylous origin. The relation of the facts to the origin of monocotyledony is evident, but a number of alternative conclusions are still in evidence.—J. M. C.

Apogamy in Osmunda.—Mrs. BROWN¹² has succeeded in securing apogamous outgrowths in cultures of *Osmunda cinnamomea* and *O. Claytoniana*. It is stated that the only reported case of apogamy in this genus is given by LEITGEB, presumably using *O. regalis*. His observations have never been confirmed, although investigators since have tried to induce apogamy in this species under varied cultural conditions. Mrs. BROWN included *O. regalis*

⁹ BRAUSE, G., Beiträge zur Flora von Papuasien. VII. Bot. Jahrb. 56:31-160. 1920.

¹⁰ BAILEY, L. H., Gentes Herbarum. I. A collection of plants in China. 1:1-49. figs. 17. 1920.

¹¹ HOLDEN, H. S., Observations on the anatomy of teratological seedlings. III. On the anatomy of some atypical seedlings of *Impatiens Roylei* Walp. Ann. Botany 34:321-344. figs. 113. 1920.

¹² BROWN, ELIZABETH DOROTHY WUIST, Apogamy in *Osmunda cinnamomea* and *O. Claytoniana*. Bull. Torr. Bot. Club 47:339-345. figs. 7. 1920.